

# Inside Wallops

National Aeronautics and Space Administration Goddard Space Flight Center Wallops Flight Facility, Wallops Island, Virginia

Volume XX-03

Number 19

June 2, 2003

# Students Set to Launch Experiments on NASA Rocket

They have been working feverishly for nine months to prepare experiments for launch aboard a NASA rocket to the upper limits of Earth's atmosphere.

Photo by Keith Koehler
Northrop-Grumman, NSROC, personnel prepare the
student payload.

Preparing proposals, developing plans, fabricating and wiring components, and hours of meetings with NASA personnel, students from five states will see their efforts pay off with the launch of a NASA sounding rocket on June 5 from Wallops Island.

The students in elementary and high schools from across the country have arrived to take part in the final preparations of their experiments, view the launch and learn the results of their efforts.

Part of the NASA Student Involvement Program (NSIP), the sounding rocket launch provides students with the opportunity to take what they learn in the classroom and apply it in a unique hands-on space flight activity.

"The students that participate in this program learn the process of developing and flying experiments on rockets," said Phil Eberspeaker, chief of the NASA Sounding Rocket Projects Office at Wallops.

"In addition, while at Wallops they learn about rocketry and the teamwork involved to launch experiments into space. We want them to get excited about becoming scientists and engineers," Eberspeaker said.

Students from four high schools in New York, Georgia, Illinois and Minnesota have been working closely with Wallops engineers and technicians to prepare their

experiments for the 6 a.m. flight on the 20-foot tall rocket to more than 25 miles (40 kilometers) altitude.

The student experiments focus on satellite communications, spectral imaging and analysis, and materials and fluids in a high stress environment.

The flight will expose the

experiments to stresses 15 times Earth's gravity.

In addition to the high school experiments, the rocket also will carry an experiment on static electricity developed by students from Mason-Dixon Elementary School in Blacksville, WV. A group of the students also will attend the launch.

Lynn Marra, NSIP Manager, said, "The flight opportunities provided through NSIP allows these students to experience first hand the work of engineers, technicians, and scientists. From this experience, NASA hopes that these students continue to pursue degrees and later careers in technical fields."

In addition to the sounding rocket flight, students from four high schools will travel to Wallops the week of June 8 as part of NSIP to prepare experiments for flight on a future space shuttle mission.

The NSIP activities, including the rocket launch, will be web cast on: <a href="http://www.wff.nasa.gov/pages/video\_schedule.html#launch">http://www.wff.nasa.gov/pages/video\_schedule.html#launch</a>

Information on the NASA Student Involvement Program is available at: <a href="http://education.nasa.gov/nsip/">http://education.nasa.gov/nsip/</a> index.html

# Wallops Shorts...... Balloon Launch

A NASA scientific balloon was successfully launched from Ft. Sumner, N.M. on May 24. The 29.47 million cubic foot balloon carried an experiment to measure polarization anisotropy in the cosmic microwave background radiation. Shaul Hanany, from the University of Minnesota was the principal investigator. Total flight time was 26 hours, 33 minutes. Float altitude was 123,600 feet.

#### Sounding Rocket Launch

Two NASA Black Brant XI sounding rockets were successfully launched from Wallops Island, the first on May 30 and the second on June 2. The experiment supplied by the U.S. Army Space and Missile defense Command and MIT Lincoln Laboratory was a research payload with several deployables and extensive ACS pointing requirements. The flights were nominal with good data received. The payload manager was Ted Gass, NSROC.

(continued on back)

#### To the Wallops family:

You may have seen the recent article in the *Daily Times*, titled "Wallops Woes", and the *Eastern Shore News*, titled "Economy: What's Next for NASA? The NASA Wallops Flight Facility Seeks to Overcome Missed Opportunities".

While the stories reasonably and accurately reflect the currently depressed state of the commercial launch industry, this happened several years ago, and they create a very misleading perception of the current health of Wallops. This is not new news!

The majority of Wallops' activities are in support of NASA and DoD and this business is stronger than ever. Most of our NASA programs are growing, and all have aggressive plans to capture new opportunities. NASA and Goddard support of Wallops activities is strong. DoD budget increases have translated into a significant amount of new flight projects, with interest continuing to grow. Wallops is healthy and our future is bright! That's the news! Feel free to email me with your comments/concerns: John.H.Campbell@nasa.gov

> John Campbell Wallops Senior Manager

(Wallops Shorts continued from front)

### In the News Eastern Shore News

"Ground Breaking Held for \$5m Wallops Center"

"Economy: What's Next for NASA? The NASA Wallops Flight Facility Seeks to Overcome Missed Opportunities"

#### **Chincoteague Beacon**

"Mapping the Greenland Ice Sheets"

#### **Daily Times**

"Wallops Woes"

#### **Eastern Shore Post**

"Wallops Activities Taking Off"

"Boaters Warned to be Aware of Wallops Launches Beginning Friday"

#### **Daily Times**

"Comrades Remember Longtime Ocean City Beach Patrol Guard"

#### On the Road

Chuck Brodell, NASA Shuttle Small Payloads Projects Office, and Charles Lipsett, NASA Carrier Systems Branch, recently provided support for a "Kinder-Garden" dedication at the John M. Bailey School in Bayonne, NJ. The students had an experiment on STS-107, Space Shuttle Columbia and are completing their project activities using the "control" set of experiment materials.

Chuck Brodell and Charles Lipsett also attended the completion of the 2-year NASA Endeavour program in which Pennsylvania middle school students are involved with NASA related projects. As part of this program, students developed and proposed Science Experiment Module experiments. Fifteen Pennsylvania school districts were represented with approximately 400 in attendance, including students, parents, teachers, Congressional staff and education officials.

Magdi Said, NASA Balloon Program Office, talked to approximately 100 students and 20 parents and teachers from North Salisbury School about scientific balloons and demonstrated tear, tensile and cylinder tests. Sam Belt and Javier Cerna, New Mexico State University Co-Ops, assisted with the presentation.

Berit Bland, BBCo, also spoke to the North Salisbury School students about NASA's Space Experiment Module program.

The EASTERN SHORE BLOOD BANK will be here on July 17 Call Linda Layton on x1561 for further information.

#### Winfred Parks

Sympathy is extended to the family and friends of Winfred B. Parks who died on May 21 in his home in Bloxom. Parks retired as a computer specialist from NASA Wallops. He is survived by two sons, three grandchildren, and two great-grandchildren.

#### Warren Williams

Sympathy is extended to the family, friends and co-workers of Warren Williams who died in Peninsula Regional Medical Center following a heart attack in his office at NASA Wallops Flight Facility on May 28. Williams began his government career at Wallops in 1965 and was an electronics engineer in the Information Services and Advanced Technology Branch.

#### **Congratulations**

Betty Hart retired May 2 from the Wallops Information Services and Advanced Technology Branch. Hart began her career with NASA at Wallops on April 9, 1973.



Photo by Betty Flowers

Dollie Harrison (above) retired May 31 from the Resource Management Office. Harrison began her career with the government in 1972 in the Out-Processing Office, 1<sup>st</sup> Infantry Division, Fort Riley, KS. Harrison continued to work for the U.S. Army, until she began work for NASA at Wallops in July 1984.

#### Women of Wallops Day June 5

Celebrating/Nurturing Our Sisters Who Are Affected by War 8:30 to 8:50 a.m. – Building E-2

The Garbage Truck Comes on Tuesdays and Fridays 9 to 11 a.m. – Building E-2

A New Day or Just Another One 11:30 a.m. to 1 p.m. – Williamsburg Room

Normal is Gone and It Won't Be Back

1:30 to 3:30 p.m. – Building E-2

Sponsored by the Women of Wallops Federal Women's Program. For more information call Pat Dworske on x2394.

#### Wallops Airport Activity

Beginning this week (June 2), the Range and Mission Management Office is scheduled to begin test operations of the NASA Langley Research Center sponsored Initial Synthetic Vision Integrated Test and Evaluation (InSITE) project.

This project is a part of NASA's goal to develop breakthrough concepts and technologies for aircraft, airspace systems and air safety and security.

Using artificial vision, advanced sensors, digital terrain databases and digital processing, the InSITE project will demonstrate technologies that will enhance safety by providing a very clear three-dimensional picture of the terrain, obstacles, runway and traffic regardless of weather conditions.

To test and verify these new concepts and technologies, the project team will be conducting a series of flight tests at Wallops Research Airport.

The testing involves three NASA aircraft in addition to a ground vehicle. The participating aircraft and ground vehicles will be conducting very controlled scenarios to evaluate the ability of the new systems to detect and respond to "near-miss" and other real-life conditions.

During these operations it is especially important for all non-participating personnel to stay clear of operational airport areas while operations are underway.

If you have questions about this project contact Libby West of the Range and Mission Management Office on x2440.

## Busch Gardens and Shorebird Tickets

The WEMA Exchange is offering Busch Gardens, Operation Salute tickets at a cost of \$29 each. This is a savings of \$16 off the regular admission. Tickets are valid May 23 through October 26, 2003.

Shorebird tickets are available at \$4 each for general admission. Stop by the Exchange in Building E-2 and pick up a free Shorebird's schedule for dates of all home games.

Call Karen Thornes on x2020 for additional info.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of Inside Wallops may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov

Editor: Betty Flowers